Serial ATA HDD Hot-Plug feature and operation guide

The new high-speed storage interface Serial ATA v2.0 has been adopted on some new ASRock motherboards. The Serial ATA v2.0 specification not only supports the 1.5Gb/s high-speed data transfer rate and RAID feature, but also supports Serial ATA HDD Hot-Plug function.

***The SATA Hot-Plug feature might not be supported by the chipset because of its limitation, the SATA Hot-Plug support information of ASRock motherboard is indicated in the product spec on our web site http://www.asrock.com/product/index.htm .**

The features of Serial ATA HDD Hot-Plug:

Function:

The Hot-Plug function allows user to remove, add-on, or swap SATA HDD while the system is power on and under operation.

Benefit:

Implement the SATA v2.0 standard

Provides a convenient interface for user to swap a SATA HDD without system power off and system reboot, to save user's time and also an advanced support interface for RAID 1 backup function.

However, examining the offering of the SATA motherboard from today's market, the serial ATA cable accessories are not standardized, especially the SATA Power Cable.
Without the SATA 15-pin power connector interface, the Serial ATA HDD cannot process the Hot-Plug by all means.

<Caution>

Even some SATA HDDs provide both SATA 15pin power connector and IDE 1x4-pin conventional power connector interfaces, the IDE 1x4-pin conventional power connector interface is definitely not able to support Hot-Plug and will cause the HDD damage and data loss.

Driven by our creative and considerate nature, ASRock offers

1. A complete SATA cable set, including
   A. 7-pin SATA data cables
   B. SATA power cable with SATA 15-pin power connector interface
2. A SATA HDD Hot-Plug operation guide

Our considerate offering provides the correct SATA cable accessories and the accurate operation details of SATA HDD Hot-Plug for you to enjoy the SATA Hot-Plug feature without suffering by the wrong operation and cables.

Please carefully carry out the following SATA Hot-Plug operation procedures step by step.

Serial ATA HDD Hot-Plug feature and operation guide

Attachment: The Serial ATA HDD Hot-Plug operation guide

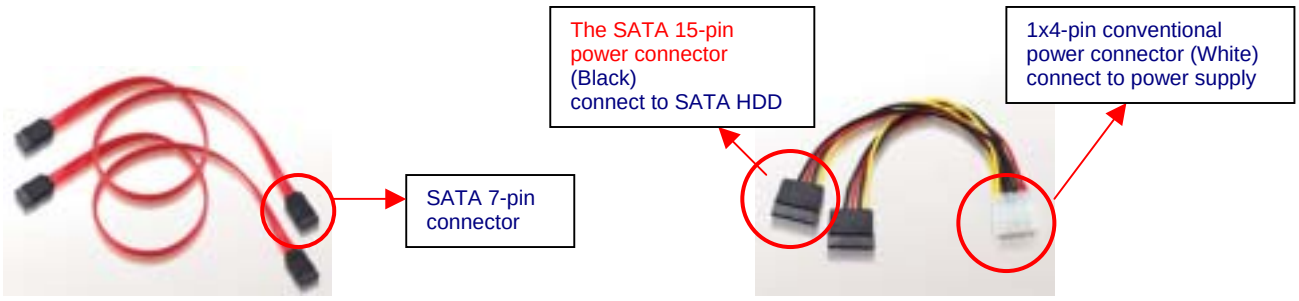
Points of Attention – Before you start to process the Hot-Plug:

1. Below operation procedure is designed for ASRock motherboard only.

   *The SATA Hot-Plug feature might not be supported by the chipset because of its limitation, the SATA Hot-Plug support information of ASRock motherboard is indicated in the product spec on our web site www.asrock.com.

2. Make sure your **SATA HDD can support hot-plug function** from your dealer or HDD user manual. The SATA HDD, which cannot support hot-plug function, will be damaged under the hot-plug operation.
3. **Please make sure the SATA driver is installed into system properly.**

   The latest SATA driver is available on our support web site www.asrock.com.
4. Make sure to use the **SATA power cable** & data cable, **which are from ASRock motherboard package**.

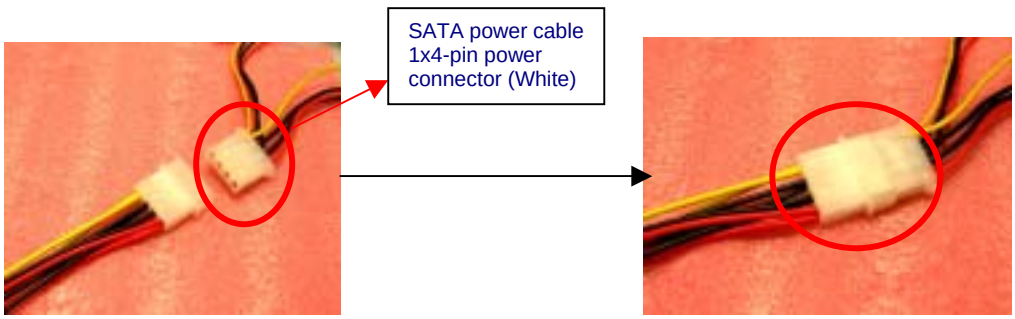

SATA 7-pin connector
The SATA 15-pin power connector (Black) connect to SATA HDD
1x4-pin conventional power connector (White) connect to power supply

SATA data cable (red) **SATA power cable**

5. **Please follow below instructions step by step to reduce the risk of HDD crash or data loss.**

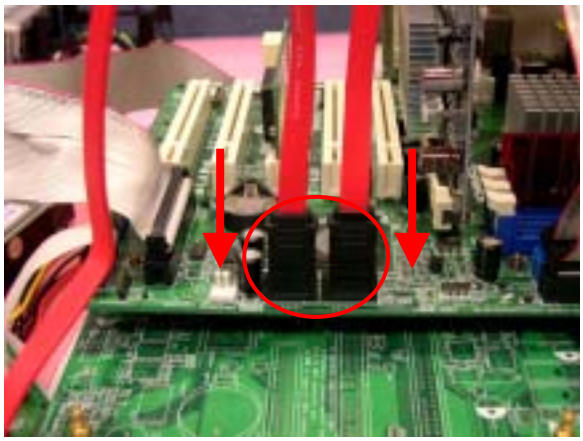
How to Hot-Plug a SATA HDD:

Step1. Please connect **SATA power cable 1x4-pin end (white)** to the power supply 1x4-pin cable.



Serial ATA HDD Hot-Plug feature and process

Step2. Connect **SATA data cable** to the motherboard's SATA connector.



Step3. Connect **SATA 15-pin power cable connector (black)** end to SATA HDD.

Step 4. Connect **SATA data cable** to the SATA HDD.

Serial ATA HDD Hot-Plug feature and operation guide

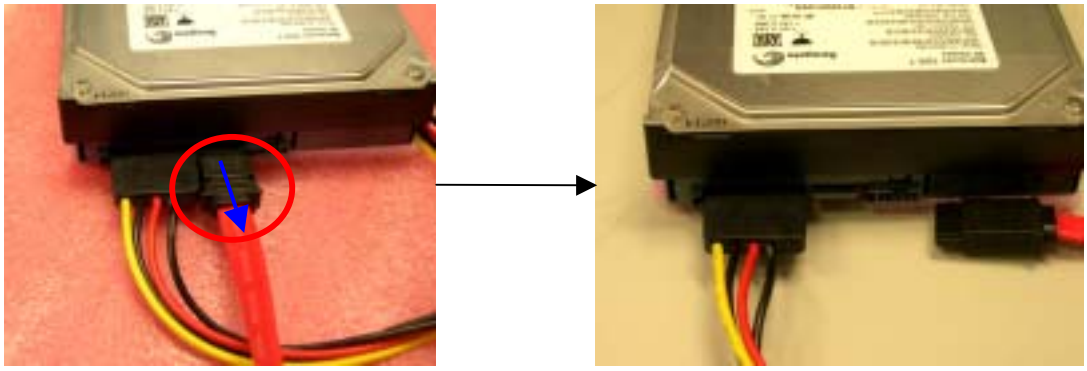
How to Hot-Unplug a SATA HDD:

Points of Attention – Before you process the Hot-Unplug:

Please do follow below instruction sequence to process the Hot-unplug.

Without step-by-step unplug procedure will cause the HDD damage and data loss.

Step1. Unplug SATA data cable **from SATA HDD side.**



Step2. Unplug SATA 15-pin power cable connector (Black) **from SATA HDD side**.